REMARKS

Claims 13, 14 and 16 are pending.

Claim Rejections – 35 USC 103(a)

Claims 13, 14 and 16 remain rejected under 35 USC 103(a) as being unpatentable over Zwilgmeyer (US 2,715,629) in view of Degen et al. (US 4,002,733) and Fablan (Chem. Rev. 1992, p.1205).

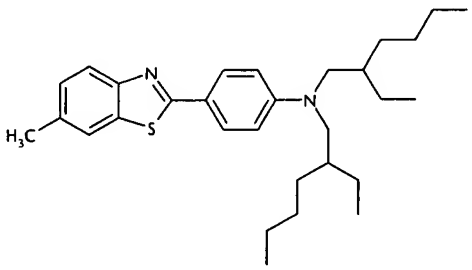
The Applicants respectfully disagree.

1. Zwiglmeyer (US 2,715,629) teaches benzothiazole derivatives which are different when compared to the benzothiazoles compounds of the present invention.

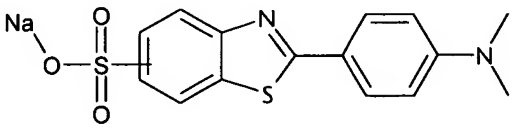
Zwiglmeyer teaches that the benzothiazoles have alkyl groups (R and R') which have **not over 4 carbon atoms each** and have sulfonic acid residues covalently attached to the benzo ring of the benzothiazole ring system.

In contrast thereto, the present benzothiazoles according to claim 1 have as characteristic feature branched or unbranched C_6-C_{12}alkyl (=R_2 of formula (1)).

This means that the benzothiazoles of the present invention are structurally clearly distinguished from those of Zwiglmeyer. For example, the compounds below illustrate this point.



Instant Example 3



Example 1 of Zwilgmeyer

Furthermore, Zwiglmeyer teaches that these compounds possess excellent fluorescence power of the proper bluish hue desirable for whitening paper (column 1, lines 39-43). Fluorescence power of the

proper bluish hue is not a physical property which is desirable for chemical sunscreens in cosmetic applications.

Referring the application of the benzothiazoles of Zwiglmeyer (Example 9), it is to be noted that the technical paper application is a completely different field when compared to cosmetic formulations.

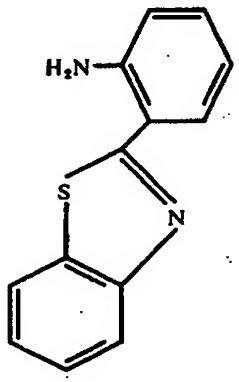
Cosmetic preparations may be in form of creams, gels, lotions, alcoholic solutions, emulsions, fat/wax compositions, stick preparations, powders or ointments; not slurries of bleached sulfite wood pulp as disclosed in Zwilgmeyer in Examples 9 and 10.

Therefore, from the teaching of Zwiglmeyer, is not obvious to one skilled in the art to apply these teachings since this reference:

- teaches compounds that are structurally different than the instant benzothiazoles,
- teaches a completely different technical field (paper manufacture versus cosmetic formulations) and
- the compounds of Zwilgmeyer possess undesirable color characteristics.

2. Degen et al teaches sunscreen compositions comprising a polyfunctional organic molecule containing two or more UV absorbing moieties.

The Examiner refers to the disclosure in column 10 of US 4,002,733 wherein the following benzothiazole is disclosed:

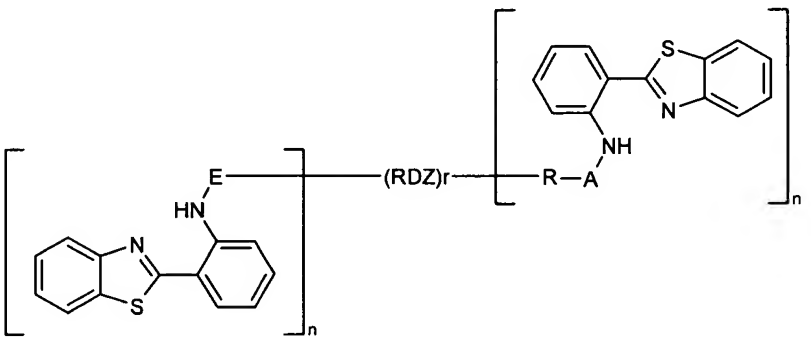


First, this benzothiazole is structurally different from those of the present invention: one characteristic feature is the branched C_6-C_{12}alkyl radical in the aminophenyl moiety in contrast to the -NH_2-group of Degen et al.

Second, it is clearly disclosed that this molecule (one of twenty three different chemical classes) represents the starting material from which X and Y chromophore moieties of formula I may be generated.

Formula I: $(XE)_n—(RDZ)_r—R-(AY)_n^1$

In this example (Example 8 of US 4,002,733), the UV screening agent would correspond to the

formula 

Again, it is to be noted that Degen et al. teach UV screening agents which are totally different from the benzothiazoles of the present invention [cf. col. 2, l.54ff]:

> These sunscreening agents are substantive, dermally non-irritating polyfunctional organic molecules containing two or more ultraviolet-absorbing moieties connected by two or more polar linking groups to one or more aliphatic hydrocarbon bridging group(s). The

Additionally, the compound of Example 8 of US 4,002,733 is a brown powder (column 19, line 6). A brown powder is not a physical property which is desirable for chemical sunscreens in cosmetic applications.

3. Fabian teaches that introduction of long alkyl chains in naphthalocyanines to increase the solubility in non-polar solvents.

Fabian further teaches that the solubility in organic solvents is increased by preventing aggregation of NC (naphthalocyanine) caused by steric interaction between the bulky and long-chain alkyl substituents (page 1205, column 1, pentultimate paragraph).

For a person of ordinary skill, it becomes clear that the increase of solubility by the introduction of long alkyl chains is directed to the bulky naphthalocyanines and is therefore very specific to naphthalocyanine compounds.

Therefore, the specific teaching of Fabian can not be transferred to compounds which are from a completely different class and structurally completely different.

The Examiner's obviousness rejection is clearly hindsight.

Therefore, from the combined teachings of US 2,715,629, US 4,002,733, and Fabian (*Chem. Rev.* **1992**, p.1205), a person of ordinary skill could not have predicted the superior properties of the instant benzothiazoles have as organic UV absorbers in cosmetic preparations.

These are surprising results and one of ordinary skill in the art would not have been expected these results, based on the cited art.

In light of this discussion and the previously submitted Wagner Declaration, the Applicants submit that the 35 USC 103(a) rejection is addressed and is overcome.

The Examiner is kindly requested to reconsider and to withdraw the present rejection.

Applicants submit that the present claims are in condition for allowance and respectfully request that they be found allowable.

Respectfully submitted,

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Enclosure: Two Month Extension of Time
Request for Continued Examination